UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
08/883,710	06/27/97	WALKER	A	RA997020

LM01/1221

JOHN D FLYNN
972 B656
IBM CORPORATION
PO BOX 12195
RESEARCH TRIANGLE PARK NC 27709

EXAMINER
VU, T

ART UNIT	PAPER NUMBER
2756	

DATE MAILED: 12/21/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

		Application No.	Applicant(s)	
Office Action Summary		08/883,710	**Walker**	
		Examiner	Group Art Unit	
		Thong Vu	2756	

☒ Responsive to communication(s) filed on *Jun 27, 1997* .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire _____3_____ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) _*1-19*_____ is/are pending in the application.

　　Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) _*1-19*_____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

　　☐ All ☐ Some* ☐ None　of the CERTIFIED copies of the priority documents have been

　　　　☐ received.

　　　　☐ received in Application No. (Series Code/Serial Number) _____ .

　　　　☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

　　*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). ____*1*____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- *SEE OFFICE ACTION ON THE FOLLOWING PAGES* ---

DETAILED ACTION

Drawings

1.   This application has been filed with informal drawings which are acceptable for

examination purposes only. Formal drawings will be required when the application is allowed.

Specification

2.   For ease of referencing, the Applicant is requested to number the lines of the claims

according to the number of the lines of the claims, not according to the line number of the page.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form

the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use
> or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19 are rejected under 35 U.S.C. § 102 as being unpatentable over Walsh et al

[4,890,316]

As per claim 1, Walsh et al disclose *a communication system* such as digital

communication systems [col 1 line 7], *transmitting a first information frame* such as Link

Acknowledgment (LA) frames [col 16 line 55]; *selectively receiving a first response in response*

to transmission of the first information frame such as the receiving modem verifies the accuracy

of the transmission [col 3 line 22]; *measuring a first amount of time between transmission of the*

first information frame and receipt of the first response such as; *and selectively modifying a*

response time value in response to the first amount of time such as in the event more than a

predetermined number of data errors are detected with a predetermined time interval, the

receiving modem generates a rate change request which is transmitted over the low-speed channel

to the high-speed transmitting modem, which responds by reducing the transmission speed of the

high-speed channel by a predetermined increment [col 3 line 24] and one LT frame is sent in a

first direction over the link and an LA frame is then returned in the opposite direction over the

link to communicate correct receipt of the LT frame.[col 16 line 56]

By this rationale claim 1 is rejected.

As per claim 2, Walsh et al disclose *incrementing an initial response time value by a timer*

resolution value, to form the response time value such as the receiving modem generates a rate

change request which is transmitted over the low-speed channel to the high-speed transmitting

modem, which responds by reducing the transmission speed of the high-speed channel by a

predetermined increment [col 3 line 24]. By this rationale claim 2 is rejected.

As per claim 3 Walsh et al disclose *incremented up to a maximum response time value*

such as By utilizing a hardware timer which is directly controlled by the start bit, it is possible to

detect higher baud rates (shorter start bits) up to the 19200 bps maximum port speed [col 14 line

15]. By this rationale claim 3 is rejected.

As per claim 4 Walsh et al disclose *the initial response time value is a default   value*

[col 9 line 46]. By this rationale claim 4 is rejected.

As per claim 5, Walsh et al disclose *the response time approximates an amount*

of time the communication system requires to transfer the first information frame between a first

data processing system and a second data processing system by saying The mechanism for

initiating a speed-up request takes the form of means for monitoring the "metric value" produced

by the trellis-code demodulation process and for generating a speed-up request whenever this

metric value repeatedly exceeds a predetermined minimum value during a predetermined time

interval [col 3 line 5]. By this rationale claim 5 is rejected

As per claim 6, Walsh et a disclose *the response time value is dynamically   modifiable*

in response to the first amount of time by saying the receiving modem attempts to adjust its

operating parameters to best match the characteristics of the available channel [col 3 line 37].

By this rationale claim 6 is rejected.

As per claims 7,8,14 contain the same limitations set forth of method claims 1,2,4

respectively . Therefore, claims 7,8,14 are rejected for the same rationale set forth claims 1,2,4

As per claim 9 Walsh et al disclose *setting a transmit sequence value when the first frame*

of information is transmitted such as The transmitting and receiving modems are typically

provided with the ability to jointly execute adaptive equalization algorithms under which the

high-speed transmitting modem sends a predetermined sequence of training data to the receiving

modem [col 3 line 33];

initiating operation of a response timer when the first information frame is transmitted by

saying Communication between the processors is synchronous and is initiated by the Receiver 101

which is periodically interrupted by a hardware timer [col 8 line 60];

comparing the transmit sequence value and a receive sequence value when the first

response is received such as At the receiving end, the same cyclic computation is performed on

the received data and the resulting computed value is then compared against the received check

value [col 16 line 39]; and

idling operation of the response timer when the transmit sequence value corresponds to the

receive sequence value such as it signals the connected DTE (by lowering CTS in hardware, or

with a software XOFF signal) to stop sending data until the modem catches up [col 15 line 50]

By this rationale claim 9 is rejected.

As per claim 10 Walsh et al disclose *restarting operation of the response timer when the*

transmit sequence value differs from the receive sequence value by saying The mechanism for

compensating for the differences in the data flow rates between the phone link and the modem on

the one hand, and between the modem and the DTE on the other, is generally called "flow

control" and is enabled by means of the transmit data flow control commands (&Hn) and received

data flow control commands (&In, &Rn), by which the user can specify whether the flow control

commands between the modem and the DTE are sent via hardware control lines (CTS for

transmit and RTS for receive), or by means of software control (XON/XOFF signals sent via the

data line) [col 14 line 44]. By this rationale claim 10 is rejected.

As per claim 11 Walsh et al disclose *receiving a second response in response to transmission of the second information frame; measuring a second amount of time between transmission of the second information frame and receipt of the second response*; and *selectively initializing a query timer with a maximum response time value* by saying If the signal quality, as indicated by RSCATTER is good for 90% of that 10 second interval, a speedup is requested [col 19 line 56] and By utilizing a hardware timer which is directly controlled by the start bit, it is possible to detect higher baud rates (shorter start bits) up to the 19200 bps maximum port speed [col 14 line 14].By this rationale claim 11 is rejected

As per claim 12 Walsh et al disclose *modifying the response time value to correspond to a residual time value remaining in a response timer after the second amount of time has passed* by saying This metric value is compared to a predetermined threshold level and, if the comparison indicates that the line quality is good, a boolean value (called RSCATTER as indicated in the module HS) is passed to the Supervisor [col 19 line 36].By this rationale claim 12 is rejected

As per claim 13 Walsh et al disclose *the response time value is selectively modified to equal the residual time value plus a timer resolution value* such as atn.sub.-- upshift.sub.-- 9600 equ 34h (requesting a speed increase to 9600 baud) [col 20 line 26]. By this rationale claim 13 is rejected

As per claim 15 Walsh et al disclose *the default value corresponds to a maximum amount of time the communication system requires to transfer the first frame of information between a first data processing system and a second data processing system* by saying The Supervisor is

provided with a read only memory for program storage and for the storage of a variety of "factor

default" values for use by the software [col 12 line 17] which have the maximum rate at 19.2k. By

this rationale claim 15 is rejected

As per claim 16 contains the same limitations set forth of method claim 3 . Therefore,

claim 16 is rejected for the same rationale set forth claim 3.

As per claims 17-18 contain the same limitations set forth of method claims 11,12.

Therefore, claim 17 is rejected for the same rationale set forth claims 11,12.

As per claim 19 contain the same limitations set forth of method claim 3 except the

preselect time period which Walsh et al disclose such as predetermine time interval [col 3 line 9].

Therefore, claim 19 is rejected for the same rationale set forth claim 3.

Conclusion

4.   All claims are rejected.

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (703)-305-4643. The examiner can normally be reached on Monday-Thursday from 6:30AM- 4:00PM. The examiner can also be reached on alternate Fridays during the same hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Frank Asta*, can be reached on *(703) 305-3817 or via e-mail addressed to [Frank.Asta@uspto.gov]*. The fax number for this Group is (703) 308-6606 or 308-5359

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**thong.vu@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thong Vu
Dec 8, 1998

FRANK J. ASTA
SUPERVISORY PATENT EXAMINER
GROUP 2700